

Time

Grade Level: 2

Purpose This lesson on time uses an ANALOGUE clock, that is one which shows the time using hands which moves in a circular direction. We can also use a digital clock which uses figure like this: **12 :43**

The specific target is: tell time in various ways. For this lesson you need a clock. You must also make some paper clocks by cutting out large circles and carefully making the numbers from 1-12.

Lesson 1

This lesson will be different if you are using mother-tongue because each language tells the time in a different way. Please adapt the lesson carefully in this case.

1. Show the class the clock. Let them look at it carefully, listen to the ticking sound and watch the hand move. If it has batteries show them where the batteries are.
2. Show the class that the hands always move one way, that is Left to right at the top and Right to Left at the Bottom. Try not to use the words Left to right.
3. Tell the class that this movement is called CLOCKWISE movement. Ask those who have used a screw driver what happens when you turn a screw clockwise (It tightens).
4. The opposite moment is called ANTI-CLOCKWISE (A screw loosens).
5. Show that the clock has two or three HANDS. They all move the same way but different speeds.
6. Count the numbers around the clock. If it has no numbers you must write them into the clock using crayon before the lesson
7. Using a paper clock place the minute hand on 12. Then move the hour hand from 1 to 2 and so on saying clearly each time ONE O'CLOCK, TWO O'CLOCK, THREE O'CLOCK.
8. Now put the hour hand at different times and say nothing. The class must answer not by repeating but by looking.

The Teaching Method In this lesson we are not only learning about telling the time but learning that some things are different according to our point of view. A clockwise movement looks anti-clockwise to someone looking the other way! Please be careful, also not to do everything by chorus. Check that the pupils have really understood by using the clock only and say nothing until they also get it right. Your aim is to have every pupil recognizing the time without anyone's help.

Lesson 2

Purpose So far you have looked at the time NOW. In this lesson you introduce the pupils to the LENGTH OF TIME TAKEN. In most languages these use different sets

of words. There is a difference between ONE HOUR'S DURATION and ONE O'CLOCK.

The specific target is: names of the days of the week and month. You must have a blackboard for this lesson. The pupils must have paper and pencil. The Lesson The lesson is given using English. However, with careful adaptation you can use any language.

1. The class will remain in the classroom. Ask questions to find out what periods of time they can already name. The more they can name, the simpler the lesson will be for you !
2. They will all name day. Some will name morning, evening, night. With adults you will hear week, month and year.
3. Ask the class when a day begins and ends. [Note : in English day means from sunrise to sunset but it can also mean from midnight to midnight.]
4. Relate this, by pointing, to the place where the sun rises and where it sets. Use gestures for times of the day that the pupils are used to in their culture.
5. Talk to the class about how the day is related to the sun.
6. Let them draw pictures or act out the difference between early morning, midday, evening and night. In a further lesson
7. Ask them if there is any connection between the moon and the day or night. Can the moon be seen in daytime? Is the moon always there at night?
8. Lead them to understand that the moon is not telling us about the night in the way the sun tells us about the day.
9. Ask them what the moon does show us.
10. Lead them to understand that the moon is related to the month.
11. What happens monthly? What does the moon look like? What did it look last night? Draw some pictures. Let the class draw some also. GO over the mother-tongue words for the moon in different phases.
12. Teach the class that the moon takes 28 to 29 days to come back to its original shape.
13. With older pupils show how the word 'moon' is related to the word 'month'. [This is true in most languages.]

The Teaching Method This lesson is more classroom based than others. You have to teach them some new things that they do not all know. Some of them are simply new words for things: others are new ideas. As always, you start from what they know and go on to what is new. What they know is called the GIVEN. We always say that a teacher goes from GIVEN to NEW.

Lesson 3

Purpose We saw that the time can be shown by hands of a clock-face (analogue) or by numbers (digital). We saw that we know how time passes by looking at the sun and moon. This lesson introduces new ideas of measuring time more exactly.

Materials/Resources At least one digital watch ; The analogue clock.

1. Go over the ideas introduced in time 1 and time 2 and if possible bring in the seasons also (rainy, dry, cold : the Zambian seasons, not summer, winter etc. !)

2. Then say : Those are the ways we measure a long period of time. How do we measure short times ?
3. Discuss : In a race we know the winner because he or she defeated the others by getting to the line first. How could we know the winner if the two competing were not running on the same day or in the same place?
4. Lead them to the answer: we have to find something to measure them against.
5. What could this be if we had no watches or clocks? Suggestions may include clapping, the pulse, a candle or an hourglass. Discuss the advantages and disadvantages of these.
6. Spend some time showing how to measure the pulse rate and making sure they know that it is the same as the heart beat. Does it change? What makes it change? HAVE A BREAK by going out of class and having races with the spectators clapping rhythmically.
7. Discuss this way of measuring time. What is the problem ? The answer should come: the speed for clapping is not constant.

A Further Lesson

8. Show the class a digital watch. Look carefully at the dots (:) showing the seconds. Explain to the class that it is like the clapping but that the speed is fixed. Every watch shows the same seconds at the same speed.
9. With the class show that when the number reach :59 then they start again at :00. Make sure that the class can recognize the square number shapes. Tell the class this is a minute (pronounced in English /minit/).
10. The class may not yet know the numbers up to 60. If they do not know these numbers, then this is the time to teach them.
11. Do a class activity clapping while shouting the numbers ? Zero, 1, 2, 3, 4, 5 Up to 59. After 59 let one girl come forward and say ONE MINUTE.
12. Do it relating to the flashing dots on the digital watch so that it is actually one minute.
13. Now revise. Each clap is a SECOND. Sixty seconds (claps) make a MINUTE.
14. Show how the secondhand moves on the analogue clock.

The Teaching Method In this lesson notice how important it is to check how much the class knows already. See point 10 above : " If they do not know these numbers, then this is the time to teach them" and "make sure that the class can recognize the square number shapes ." Always make sure you know what is really given and really new. What you think is given may actually be new to some pupils ! ?

What is the value of teaching about minutes and seconds when the pupils can not afford a watch ? Anyway, minutes and seconds are not important in the village.1. We are not only teaching about the time, but about the use of numbers.2. We must always hope that things will change one day. When they change for the better we must be ready.

